





1.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

 <p style="font-size: 24pt; font-weight: bold; margin-top: 10px;">A-405</p>	Voltage 200 to 1000 V	Current 1.0 A	
			
	FEATURES <ul style="list-style-type: none"> Ultrafast recovery time for high efficiency Low power losses Low forward voltage drop High forward surge current capability Solder dip 260°C, 10s Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C 		  RoHS COMPLIANT
	MECHANICAL DATA <ul style="list-style-type: none"> Case: A-405. Epoxy meets UL 94V-0 flammability rating. Polarity: As marked on the body. Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test. 		
TYPICAL APPLICATIONS Used in high frequency rectifier of switching mode power supplies, inverters, freewheeling diodes, dc-to-dc converters, and other power switching application.			

Maximum Ratings and Electrical Characteristics at 25°C

		HER103SG	HER105SG	HER106SG	HER107SG	HER108SG
Marking Code		HER103SG	HER105SG	HER106SG	HER107SG	HER108SG
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Maximum Average Forward Rectified Current 9.5mm Lead Length @ $T_A = 55^\circ C$	1.0 A				
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	30 A				
V_F	Maximum Instantaneous Forward Voltage at 1.0A (Note 1)	1.0 V	1.3 V	1.7 V		
I_R	Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	5.0 μA 150 μA				
T_{rr}	Maximum Reverse Recovery Time from $I_F = 0.5A$; $I_R = 1A$; $I_{RR} = 0.25A$	50 nS		75 nS		
C_j	Typical Junction Capacitance at 1 MHz and reverse voltage of $4V_{DC}$	20 pF		15 pF		
$R_{th(j-a)}$	Typical Thermal Resistance (Note 2)	90 °C/W				
T_j	Operating Temperature Range	-65 to + 150 °C				
T_{stg}	Storage Temperature Range	-65 to + 150 °C				

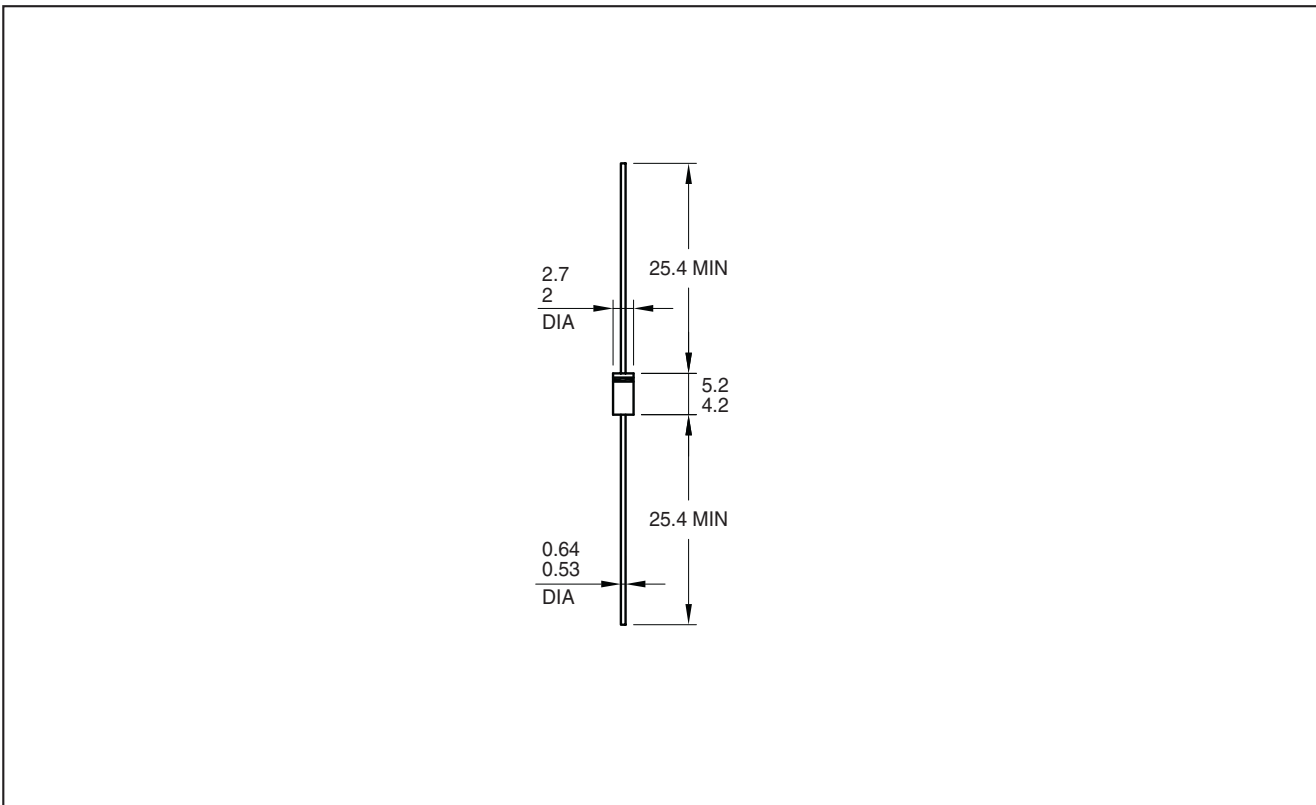
Notes: 1. Pulse Test: 300 μ Pulse Width, 1% Duty Cycle
 2. Mount on Cu-Pad size 5mm x 5mm on PCB.

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Ordering information

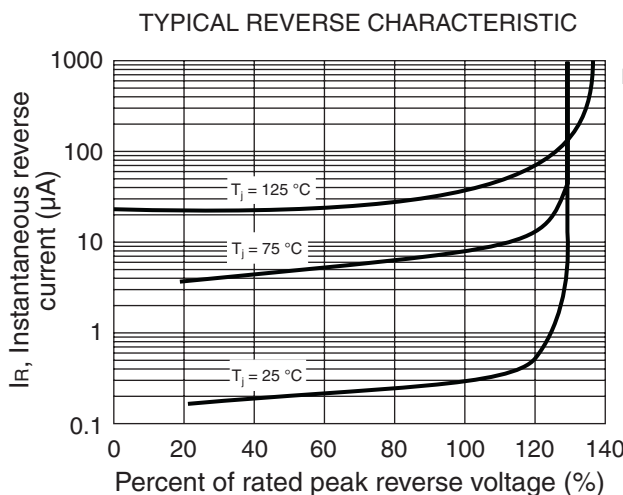
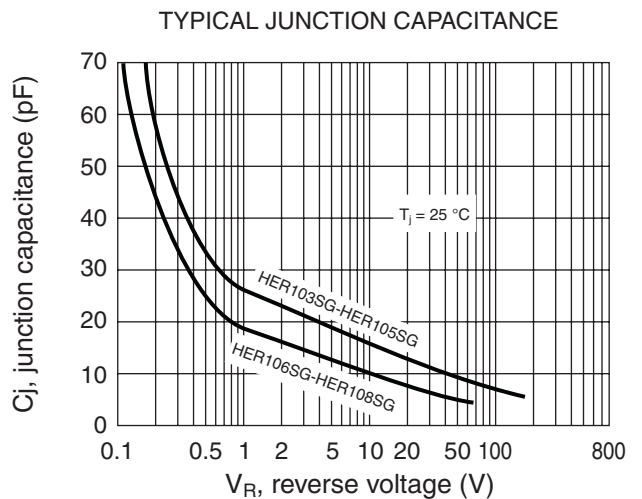
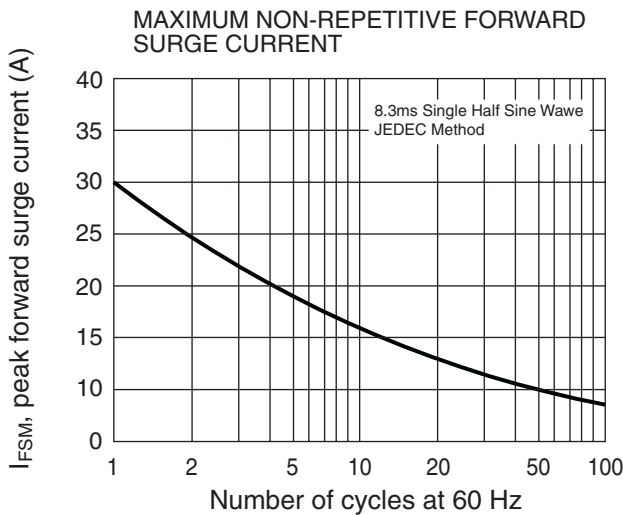
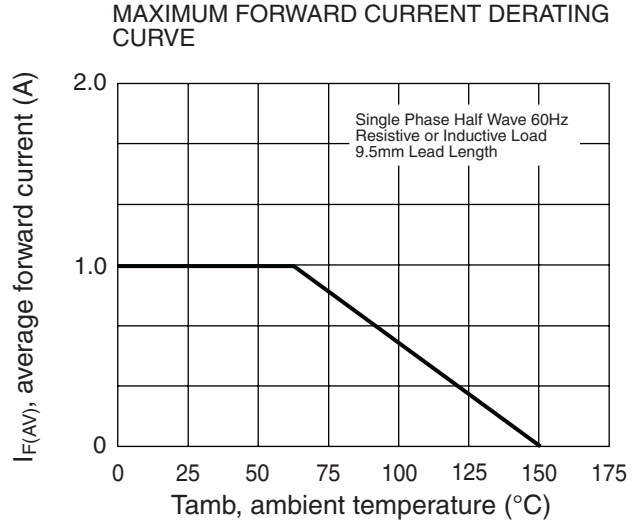
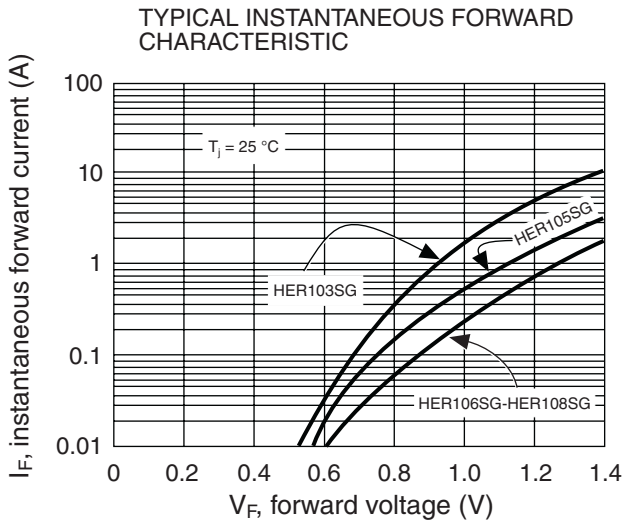
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
HER105SG AMP	AMP	AMMO BOX	5,000	0.22
HER105SG TR	TR	14" diameter tape and reel	3,000	0.22

Package Outline Dimensions: (mm) A-405

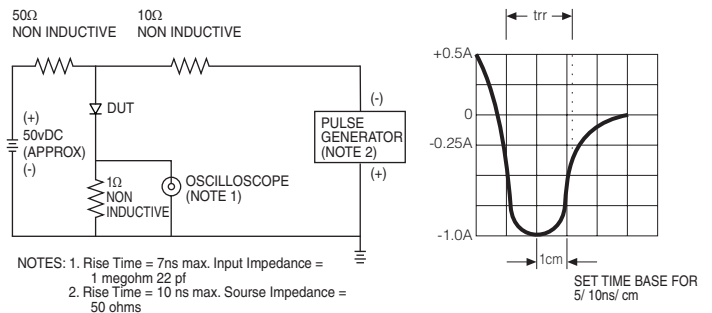


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Ratings and Characteristics (Ta 25 °C unless otherwise noted)



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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Disclaimer

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